III. *An Account of a præternatural Tumour on the Loins of an Infant, attended with a* Cloven Spine. *By Dr.* Rutty, *Fellow of the College of Phyſicians, and of the* Royal Society.

THE curious Mr. *Ruyſch*, in an Obſervation on the *Spina Bifida*, takes notice that other Writers have deſcrib'd it to be cloven into two equal parts longitudinally, as Butchers ſplit the Back-bone of an Ox or Sheep; whereas out of ten Subjects, which he had an opportunity to examine, not one prov'd to be in that manner, the Body of the *Vertebræ* being entire, and the *Acute Proceſſes* only divided. Pretty near this Deſcription, is the *Spine* to be treated of, and I the rather trouble this Society with it, becauſe it don't appear by the Tranſactions, that it has as yet come before us.

The Back-bone is of a female Infant ſix Days old; whoſe Mother, when ſeven Weeks gone with Child, upon a fright occaſion'd by her Husband's falling from a Horſe and very much bruiſing his Loins, gave the *Embryo* this injury; but notwithſtanding ſhe went out her Time, and the Child was full grown.

There appeared upon the region of the Loins, in the ſame place where the Father receiv'd his hurt, a Tumour about the bigneſs of a ſmall Turnep, with a broad *Baſis*, around which the Skin was diſcolour'd, as by an *Ecchymoſis*, but it grew immediately from thence pellucid, like a Veſicle rais'd by *Cantharides*, and continued ſo throughout, except juſt at its *Apex*, where was a Subſtance like a *Fungus*. This Bladder was fill'd with

with a Liquor, which in Scent and Colour reſembled the true Urine: inſomuch, that upon ſtrictly examining the Linnen ſtain'd by what iſſu'd from hence, with that from the *Pudenda*, we cou'd perceive no ſenſible difference, and concluded there was a Communication between the left Kidney and the Orifice, into which the Surgeon's Probe paſs'd obliquely upwards, about an Inch. Of the ſame opinion was Dr. *Pellet*, then preſent. Whether the ſame Similitude may hold, betwixt the Urine and this Liquor, in all Caſes of the like Nature, I have not had opportunites to obſerve: but as Mr. *Ruyſch* has taken no notice of it, in ſuch a Number of Subjects, that have been before him, I am apt to think, that it does not; being eaſily perſuaded, that if it did, it would not ſo often have eſcap'd his inquiſitive Reſearches. I cou'd have wiſh'd however, that this Fluid had been ſav'd; to have try'd by Experiments, in what other Qualities, beſides the Scent and Colour, it might correſpond with the Urine; which wou'd have given us a farther Inſight into the Cauſe of this Affinity between them, in the particular inſtance now before us.

Upon opening the Body, where were preſent Dr. *Pellet*, and Mr. *Stephens* an ingenious Surgeon, the Kidneys, contrary to Expectation, were *perfect*, and did not any way communicate with the outward Orifice.

But upon clearing away the Fungous Subſtance, which took up all the *Sulcus* or Hollow of the *Spine*, we found where the Perforation tended; a long Probe eaſily paſſing up the Channel, which contains the *Medulla Spinalis*. Throughout this *Fungus* were diſpers'd a great many endings of ſmall Nerves, from whence diſtill'd this, as it were, Urinous Liquor, which occaſion'd the Tumour: the reſt of the *Medulla* was more compact, and fill'd the Cavity of the *Spine*; tho' in ſome Subjects it has been waſted to ſuch a Degree, that by blowing

into the Orifice you may inflate the *Dura Mater*; as was done by Mr. *Dobyns* a Surgeon, in a Caſe of this Nature. The Coat of the Tumour conſiſted at its *Baſis* of the *Cuticula*, *Cutis*, and *Membrana Adipoſa*: the two firſt of which forthwith terminating, the *Cuticula* only was continued; immediately under which appear'd the *Muſcles* and *Fungus* above mention'd. In this it differs from thoſe of Mr. *Ruyſch*, which received their Coats from the *Membranes* that cover the *Medulla:* as likewiſe from thoſe taken notice of by *Tulpius*, which borrow'd theirs from the *Peritonæum*, as he ſays; tho' by his own Deſcription, it is more likely they proceeded from the ſame Membranes.

Theſe Tumours conſtantly attend the *Spina Biſida*: inſomuch, that when any of them preſent themſelves on the Loins or Back of a new-born Infant, we have good grounds to pronounce *This* to be the Cauſe; but we may be poſitive in it, if the Child can't move its lower Limbs; the want of which motion is an infallible Indication, that the *Medulla Spinalis* reaches no farther than the Swelling, whereby the Nerves are not diſtributed to thoſe Parts. They appear differently in different Subjects. In ſome the whole Tumour is *Opake*; which proceeds from ſmall Filaments of Nerves propagated in great numbers throughout its Coat, and not from the thickneſs of the Skin, as *Ruyſch* will have it. In others it is *pellucid*; and then the *Medulla* terminates at once at the Aperture of the *Spine*, and does not ſhoot out into any Ramifications. This before us is a Compoſite of both Species, the greater part of which was *pellucid*; the leſs, *viz.* the *Apex*, *opake*.

The Back-bone itſelf, you may obſerve, is not cleft, but has its *Vertebræ*, with their *other Proceſſes* entire, and is only defective in its *Spines* or *Acute ones*. But that

that Portion of the *Vertebræ*, which ſhould make an acute Angle, from whence their *Spinal Proceſſes* naturally ariſe, in order to form the *Specus* or Paſſage for the Marrow, inſtead of that, gapes and lies almoſt in a ſtrait Line on each ſide; whereby the *Medulla* is defrauded of its uſual Guard from external Injuries. This Defect begins at the third *Vertebra* of the Loins, and is continued to the end of the *Os Sacrum*: which laſt is very extraordinary, it ſcarcely ever happening to this Bone; the reaſon of which I take to be the more than ordinary Compactneſs of its *Vertebræ*, whereby it is leſs liable to be injur'd by any Impreſſion. For we obſerve, that in Adults they grow ſo cloſe together, as to unite and form one large and ſolid Bone.

As the Caſe before us is a *Vitium Conformationis* owing to the Mother's Imagination, ſo the Same ſometimes is occaſion'd by *Matter* lodging upon the *Spine*, and eroding the *Vertebræ* by its Acrimony: but then you find a *carious Bone*, whereas in theſe *præternatural* Caſes, there remain no ſuch Footſteps. This was obſerv'd in the Body of the late Lord *Peterborough*, as related by Mr. *Cowper*: Upon the opening of which, He found a large Tumour, from whence flow'd a browniſh colour'd Matter; and under it, the upper and fore part of the ninth, and the lower part of the eighth *Vertebræ* of the *Thorax* were conſumed and gone, the *Medulla Spinalis* being cover'd with its *Membranes only*. This gave riſe to thoſe Symptoms in that *morbid* Caſe, ſo nearly reſembling the above recited in this *præternatural* One.

It is manifeſt from what has been ſaid, that theſe Caſes are incurable, and muſt in a little time kill the Patient. But it is almoſt immediate Death to open the Tumour; which every Surgeon will naturally do, that has not ſeen or read concerning it: the Fluid ſeeming

to require a Diſcharge. It is for the ſake of thoſe Gentlemen that I have taken upon me to deſcribe it, who poſſibly may not have the above-mention'd Authors in their Hands; the only Ones that have obſerv'd it with any tolerable Accuracy.

IV. *An Account of Two Obſervations in Gardening, upon the change of Colour in Grapes and Jeſſamine. In a Letter from Mr.* Henry Cane.

Hillingdon *near* Uxbridge,
Oct. 31. 1720.

BEING a little curious in the Collection of all my ſorts of Fruits, amongſt other ſorts, I have three or four of white Muſcadine Grapes, very diſtinguiſhable by their Taſtes, one of which pleaſed me above the reſt; a Cutting of which about ſix Years ſince I planted againſt a Wall, on an Eaſtern Aſpect, where it has the Sun from its riſe till half an hour after Twelve. The Soil is a ſtiff Clay, but to make it work the better, I meliorated that, by mixing ſome Rubbiſh of the Foundation of an old Brickwall, where it now grows. In *January* laſt was twelve Month I pruned it, and the Figure was thus,

Left Hand T Right Hand *Black*

At time of Year it ſhot at both Hands about twenty two Inches of a ſide, before it came to a Joint; that on the Right was a very luxurious exuberant Branch, as big as the body of the Tree, the other ſide not half ſo thick or big, and the Leaves on the right were as big again as the other

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